Product Evaluation

The following product has been evaluated for compliance with the wind loads specified in the International Residential Code (IRC) and the International Building Code (IBC).

This product evaluation is not an endorsement of this product or a recommendation that this product be used. The Texas Department of Insurance has not authorized the use of any information contained in the product evaluation for advertising, or other commercial or promotional purpose.

This product evaluation is intended for use by those individuals who are following the design wind load criteria in Chapter 3 of the IRC and Section 1609 of the IBC. The design loads determined for the building or structure shall not exceed the design load rating specified for the products shown in the limitations section of this product evaluation. This product evaluation does not relieve a Texas licensed engineer of his responsibilities as outlined in the Texas Insurance Code, the Texas Administrative Code, and the Texas Engineering Practice Act.

For more information, contact TDI Engineering Services Program at (800) 248-6032.

Evaluation ID: WIN-1819

Effective Date: February 1, 2015
Re-evaluation Date: July 2016

Product Name: Ultra Sterling Aluminum Clad Wood Double Hung Windows, New Construction, Impact Resistant

Manufacturer: Kolbe & Kolbe Millwork, Inc.
1323 South Eleventh Avenue
Wausau, WI 54401
(715) 842-5666

General Description:

System	Description	Label Rating	Design Pressure Rating	Hallmark Certification
1	Ultra Sterling Double Hung	LC-PG65 46x80-H Missile Level D	+65 / -70 psf	413-H-1225.00 413-H-1225.01 413-H-1225.02 413-H-1225.03
2	Ultra Sterling Double Hung; Fiberglass Checkrail Cover	LC-PG65 46x80-H Missile Level D	+65 / -65 psf	413-H-1129.00 413-H-1229.02 413-H-1129.03 413-H-1129.04

Product Dimensions:

System	Overall Size	Top Sash Size	Bottom Sash Size
1	45-1/2" x 80-7/16"	42-3/16" x 38-1/4"	42-3/16" x 40-1/8"
2	45-1/2" x 80-7/16"	42-3/16" x 38-1/4"	42-3/16" x 40-1/8"

Product Identification (Certification Label on Window):

System		
1	Certification Agency	WDMA
	Manufacturer's Name or Code Name	Kolbe & Kolbe Millwork Co., Inc.
	Product Name	Ultra Sterling Double Hung
	Test Standards	AAMA/WDMA/CSA 101/I.S.2/A440-08 AAMA/WDMA/CSA 101/I.S.2/A440-11 ASTM E 1886-05/ ASTM E 1996-06/09 Missile Level D
2	Certification Agency	WDMA
	Manufacturer's Name or Code Name	Kolbe & Kolbe Millwork Co., Inc.
	Product Name	Ultra Sterling Double Hung
	Test Standards	AAMA/WDMA/CSA 101/I.S.2/A440-08 ASTM E 1886-05/ ASTM E 1996-06/09 Missile Level D

Impact Resistance:

System	Impact Resistant	Requirement
1, 2	Yes	These products satisfy TDI's criteria for protection from windborne debris in the Inland I and Seaward zone. Install the assemblies at a height on the structure that does not exceed the design pressure rating for the assemblies.

Installation:

Option 1: Fasten the assembly to minimum Southern Yellow Pine lumber. Secure the assembly to the wall framing using Kolbe & Kolbe metal installation clips. Secure the installation clips (1-5/8" x 10-1/16" x 0.04") to the frame side jambs, head, and sill. Secure the clips to the frame with two (2); No. 8 x 3/4" screws. Secure the clips to the wall framing with one (1); No. 8 x 1-3/4" screw. Use fasteners long enough to penetrate a minimum of 1-1/2" into the wall framing. The table below specifies the clip spacing.

Installation Clip Spacing:

System	Distance From Each Corner	Head (on center spacing)	Sill (on center spacing)	Side Jambs (on center spacing)
1, 2	Head: 15-3/16" Side Jambs: 11-1/2"	None	None	11-1/2"

Option 2: Fasten the assembly to minimum Southern Yellow Pine lumber. Secure the assembly to the wall framing using the frame with minimum No. 10 screws. Use fasteners long enough to penetrate a minimum of 1-1/2" into the wall framing. The table below specifies the fastener spacing.

Fastener Spacing:

System	Distance From Each Corner	Head (on center spacing)	Sill (on center spacing)	Side Jambs (on center spacing)
1	Head: 11-3/8" Side Jambs: 8-15/16"	None	None	8-15/16"

Nailing Flange (Options 1 and 2): Secure the nailing flange to the wall framing with minimum 12-gauge smooth shank roofing nails spaced 7" on center along the perimeter of the window.

Note: Keep the manufacturer's installation instructions available on the job site during installation. Use corrosion resistant fasteners as specified in the IRC, the IBC, and the Texas Revisions.